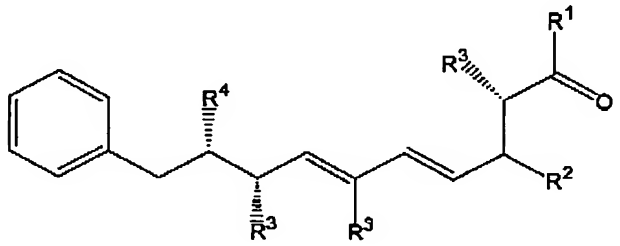
Application No. 10/070,302
Filed: May 1, 2002
TC Art Unit: 1641
Confirmation No.: 2837

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A compound comprising one or more polypeptides providing a binding site of a monoclonal, polyclonal or recombinant antibody or a functionally active derivative or part thereof, wherein said compound is prepared using the group of formula (I) as a hapten, and said compound is capable of specifically binding to a compound comprising the group of formula (I) represented as



(I)

and which is part of a toxin derived from a cyanobacterium, wherein group R^1 represents a halogen atom, $-OSO_3$, $-OR'$ or $-NR'_2$ and group R^2 represents hydrogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)acyl, (C_1-C_4)acylamino, (C_1-C_4)carboxyaminoacyl, glutamidyl, or 2-aminopropionamidyl, and wherein

~~or the groups R^1 and R^2 are connected to each other to form a cyclic moiety,~~

the groups R^3 which may be the same or different are each independently selected from the group consisting of hydrogen and (C_1-C_4)alkyl,

group R^4 represents (C_1-C_4)alkoxy,

the phenyl group may be substituted or unsubstituted, and further wherein the groups R' represent hydrogen, substituted or unsubstituted (C_1-C_4)alkyl or (C_1-C_4)acyl.

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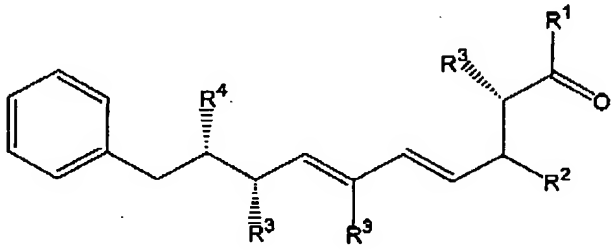
2. (Canceled)

3. (Previously Presented) The compound according to claim 1, wherein the groups R^3 each represent methyl and group R^4 represents methoxy.

4. (Currently Amended) A compound comprising one or more polypeptides providing a binding site of a monoclonal, polyclonal or recombinant antibody or a functionally active derivative or part thereof, wherein said compound is prepared using the group of formula (I) as a hapten, and said compound is capable of specifically binding to a compound comprising the group of formula (I) represented as



(I)

and which is part of a toxin derived from a cyanobacterium, wherein group R^1 represents acylamino and group R^2 represents (C_1-C_6)acyl; or group R^1 represents glycyl or D-alanyl and group R^2 represents acetyl; or group R^1 represents $-NH_2$ and group R^2 represents glutamidyl or 2-aminopropionamidyl, and wherein

~~or the groups R^1 and R^2 are connected to each other to form a cyclic moiety,~~

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the groups R^3 which may be the same or different are each independently selected from the group consisting of hydrogen and (C_1-C_4)alkyl,

group R^4 represents (C_1-C_4)alkoxy,

the phenyl group may be substituted or unsubstituted, and further wherein the groups R' represent hydrogen, substituted or unsubstituted (C_1-C_4)alkyl or (C_1-C_4)acyl.

5. (Previously Presented) The compound according to claim 4, wherein the groups R^3 each represent methyl and group R^4 represents methoxy.

6. (Canceled)

7. (Previously Presented) The compound according to claim 1 or claim 4, wherein the toxin is selected from the group consisting of mycrocystin and nodularin congeners.

8. (Previously Presented) The compound according to claim 1 or claim 4 which is a polyclonal, monoclonal or recombinant antibody or a functionally active derivative or fragment thereof.

9. (Currently Amended) A method for preparation of the compound according to claim 1 or claim 4, said method comprising the steps of:

(a) providing a compound containing a group represented by formula (I) as defined in claim 1 or claim 4;

(b) coupling the compound of step (a) to ~~a~~ an immunogenic carrier to form a conjugate;

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(c) immunizing an animal with the conjugate obtained in step (b); and

(d) isolating the animal's blood, blood serum and/or spleenocytes.

10. (Currently Amended) The method according to claim 9, wherein the immunogenic carrier is a polymeric substance.

11. (Currently Amended) The method according to claim 10, wherein the polymeric substance is selected from the group consisting of polyethyleneglycol, polypeptides, proteins, polysaccharides ~~or~~ and plastic supports.

12. (Previously Presented) The method according to claim 11, wherein the substance is a protein and said protein is selected from bovine serum albumin, ovalbumin, cationised bovine serum albumin or horseradish peroxidase.

13. (Canceled)

14. (Previously Presented) A diagnostic kit containing the compound according to claim 1 or claim 4.

15. (Previously Presented) An affinity matrix containing the compound according to claim 1 or claim 4 coupled to a polymeric resin.

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16. (Currently Amended) A method for detecting a compound containing a group represented by formula (I) as defined in claim 1 or claim 4, said method comprising the steps of:

(a) providing a compound according to claim 1 or claim 4;

(b) mixing a second compound suspected of containing a group represented by formula (I) as defined in claim 1 or claim 4 to form a mixture; and

(c) performing an assay that detects binding of the compound according to claim 1 or claim 4 to the second compound.

17. (Currently Amended) A method for concentrating a compound containing a group represented by formula (I) as defined in claim 1 or claim 4 from a fluid or for substantially decreasing the amount of a compound containing the group represented by formula (I) in a fluid comprising the steps of:

(a) preparing the compound according to claim 1 or claim 4,

(b) coupling the compound obtained in step (a) to a polymeric matrix, and

(c) contacting the fluid with the polymeric matrix obtained in step (b).

18. (Currently Amended) The method according to claim 17, wherein the fluid is hemodialysis water, drinking water or water derived from rivers, lakes ~~and~~ or oceans.

19. (Canceled)

20. (Canceled)

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21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

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